

ABSTRACT OF THE DISCLOSURE

A sintered permanent magnet having a composition comprising, by mass, 27-33.5% of R, which is at least one of rare earth elements including Y, 0.5-2% of B, 0.002-0.15% of N, 0.25% or less of O, 0.15% or less of C, and 0.001-0.05% of P, the balance being Fe, wherein it is in the shape of a ring having an outer diameter of 10-100 mm, an inner diameter of 8-96 mm, and a height of 10-70 mm, with a plurality of magnetic poles axially extending on an outer circumferential surface. The distribution of a surface magnetic flux density B_0 on magnetic poles in an axial direction of the ring magnet is in a range of 92.5% or more of the maximum of B_0 .

BEST AVAILABLE COPY